

Fly stocks and food

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 An abbreviated version of this protocol was published in eLIFE

An auxin-inducible, GAL4-compatible, gene expression system for *Drosophila*

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Detailed protocol

Ingredients

For 1 litre of 10mM Auxin food:

- Agar 8g
- Polenta 20g
- Fructose 80g
- Brewer's Yeast 100g
- K-NAA (1-naphthaleneacetic acid potassium salt) 2.24g
- 1litre water

Method

1. Put the agar and polenta in the pot. Add 750 ml of water (use kettle) and bring to a boil, stirring constantly and vigorously, over highest heat. **NB: It is important that the food reach a full boil in order to dissolve the agar.**
2. Turn the heat to minimum. Add the fructose and the yeast. (mix these two ingredients together before adding them, on the assumption that this reduces clumping.)
3. Simmer 10 minutes with heat on low, continuing constant stirring. Watch to make sure it doesn't boil over.
4. Turn off the heat, then add 200 mls of room temperature water, still stirring constantly. The temperature should now be 70°C or just above.
5. Allow to cool to below 70°C, then add (still stirring constantly):

5ml 15% Nipagin in ethanol

7.5ml Propionic acid

40ml of freshly prepared 250mM K-NAA solution (K-NAA dissolved in water)

(Nipagin = Nipagin M = tegosept M = p-hydroxybenzoic acid methyl ester)

1. Dispense about 8ml per fly vial.

How to cite: (Readers should cite both the Bio-protocol preprint and the original research article where this protocol was used)

1. McClure, C. and Southall, T. (2022). Fly stocks and food. Bio-protocol Preprint. bio-protocol.org/prep1911.
2. Aughey, G. N., Barber, A. F., McClure, C. D., Sia, C. Y., Southall, T. D., Butt, K., Duggal, A., Estacio-Gómez, A. and Hassan, A. An auxin-inducible, GAL4-compatible, gene expression system for *Drosophila*. eLIFE. DOI: [10.7554/eLife.67598](https://doi.org/10.7554/eLife.67598)

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